

Foreword

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Humans have been fascinated by robotics for a long time and the many science fiction characters bear witness of our wish to use artificial helpers and companions in our daily life. Technically we are still quite far from the universally potent machines such as C3PO, NS-5 or Data. However, robots are clearly on the rise: in manufacturing and increasingly in every day's environments.

In professional applications service robots are already having a significant impact in areas such as agriculture, surgery, logistics and underwater applications and are growing in economic and social importance. Driven by evolving security threats, there is a growing need to monitor everyday environments, which results in increased and difficult-to-manage workloads and data flows. To help meet this need, robots will play an even greater role in the maintenance, security and rescue market.

Robotics in personal and domestic applications has experienced strong global growth with relatively few mass-market products: floor cleaning robots, robo-mowers and robots for edutainment. Future product visions point to domestic robots of higher sophistication, capability and value, such as assistive robots for supporting the elderly, for helping out with household chores and for entertainment.

In 1999, service robots were assessed statistically for the first time through a joint publication by the International Federation of Robotics (IFR) and the United Nations Economic Commission for Europe (UN ECE, Geneva). Prior to this effort a suitable classification scheme for the heterogeneous domain of service robots and a data collection scheme have been worked out and improved ever since, jointly with standardisation efforts in robotics. Today, the IFR World Robotics section on service robotics has established itself as the reference publication in statistics, market forecasts, and product overview. Robot suppliers, media, government bodies, financial analysts and technology scouts are among its readers.

In response to the increasing interest in service robotics it was decided in 2008 by the IFR Statistical Department that from 2010 on the World Robotics Report be expanded into a two volume edition. Therefore, this volume marks the fourth edition of the World Robotics 2013 Service Robotics yearbook. Due to the overwhelming activity in the field this volume again has increased in size compared to the year before.

I am confident that the World Robotics 2013 yearbook will again offer an exhaustive overview on market data, innovations and examples of entrepreneurial activities. I hope you find the material interesting and helpful in getting more insight into this exciting field of highest future relevance and business opportunities. In case you have suggestions, questions or any other comment, please do not hesitate to contact me.